FUNCTIONAL INGREDIENTS

A new approach from HI-FOOD leading to outstanding Free-From products

Introducing new functional building blocks and formulations for the production of allergen-free, E-number free, palm-free and, more in general, free-from products. Like a new technological platform, the innovative functional ingredients developed by HI-FOOD allow the development of a new generation of vegan or vegetarian products as well as the improvement of existing products.

OUR APPROACH TO PRODUCT DEVELOPMENT

HI-FOOD functional ingredients are developed internally through careful and methodic studies and experiments. HI-FOOD operates through a controlled networked supply chain system: from special raw materials to processing facilities the functionality and the quality of the products are guaranteed. This is our job: studying functionality, testing interactions between ingredients, creating systems, reaching the best technical effect in real applications.



PRODUCT PROPERTIES AND APPLICATIONS

CLEAN LABEL/ALLERGEN FREE

- Improved nutritional profile
- Product properties improvement
- No E-numbers
- No common allergens nor emulsifiers

PALM-FREE/LOW SATURATED FATS

- Fats are emulsified to create a stable system
- Stability to oxidation
- Processability: easy to use in industrial processes
- Nutritional improvements: less saturated fats, more fibers
- Higher production yield
- Clean label

VEGETARIAN/VEGAN

- Egg free
- Additive and allergen free
- Free from preservatives, chemicals and tropical oils
- Texturizing and stabilizing properties
- Shelf-life improvements
- Healthy profile
- Tasty







FROM GLUTEN-FREE TO A BROADER RANGE OF FREE-FROM PRODUCTS

HI-FOOD can provide a range of ingredients that can be freely combined as building blocks to create a broad variety of free-froom products, while solving typical problems of the food industry such as: clean label, palm-oil replacement, chemical emulsifiers replacement, water retention, mold prevention, anti-staling, egg-replacement, product improvement. Basic recipes and full technical assistance are offered, too.



APPLICATION

PRODUCT NAME FUNCTIONALITY KEY PRODUCT FAMILIES

| HI-SUB4PALM | Emulsifying effect (water + fats or fats only) | Replacement of Palm Oil with other oils + fibers in bakery, in margarine (fat block), in hydrated and anhydrous creams and systems |
|------------------------|--|--|
| HI-FIBRE | Emulsifying effect (water + fats) | Replacement of chemical emulsifiers; increase plasticity, elasticity; avoid or reduce checking |
| HI-FIBRE | Strong water binding capacity | Water binding in an irreversible way in virtually all food products; gel formation in cold conditions |
| HI-USE | Stabilizer and Texturizer | Vegan applications |
| HI-VEG | Natural vegetable raw materials, specific emulsifying and gelling capacities | Studied to work properly at mayonnaise manufacturing conditions (low pH, high-speed stir) |
| OTHER PRODUCT FAMILIES | | |
| HI-NET | Enzyme (TG based) | Anti-crumb, stronger network, cross-linking |
| | | |

| HI-SHIELD | Natural flavour enhancer and antibacterial | Natural concentrated mold inhibitor, shelf-life extender and natural savory enhancer |
|----------------------------|--|--|
| CUSTOM-MADE INGREDIENTS | According to requirements | Customer-specific – Free From, Vegan, Clean Label, etc |

Other Product Information

No GMO according to regulations CE 1829/2003, CE 1830/2003 and Directive CE 2001/1. No Allergens according to directive CE 89/2003, CE 26/2005, CE 142/2006 and CE 68/2007). Produced in a certified facility. HI-FOOD operates to ensure full batch traceability, an extensive Quality Control regime together with technical and application development support.

For more information about HI-FOOD ingredients and other customized applications, please contact:



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